Guest Editorial Preface

Special Issue on Deep Learning Technology for the Supply Chain Intelligence in E-Business

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On current scenario, E-Business facilitates distributors, monetary firms, and consumers in searching, customizing, buying, selling, promoting, and distributing products in many innovative ways. It offers a comprehensive strategy for reducing the risks by improving the communication process that can be used to efficiently regulate, organize, and modify their approaches. Furthermore, in e-business, the supply chain renders an eminent aspect, as it comprises end-to-end operations from the acquisition of the final by-product through its distribution to the consumer. The intelligence system incorporated along with the existing supply chain has made a vital transformation in e-business for over a decade. The inference of enhanced learning models builds impressive refinements by recognizing abnormalities and structures and delivering automatic predictions using the immense volume of datasets. The machine learning algorithm self-instructs by monitoring the results and streamlines the traditional prototypes for finer outcomes. However, this approach varies with the duration, the economy, and insufficient resources while implemented in the supply chain. When integrating the deep learning technique with the machine learning algorithms, leads to rectilinear and non-rectilinear conversions. The applications of deep learning for the supply chain in electronic business aid in determining the performance of the systems with distinct grades of complications. This special issue explores deep learning technologies for supply chain intelligence in the electronic business.

The research community has responded enthusiastically. After effective examination by experts, only research studies that match the journal's standards were approved. This special issue comprises eleven papers, each of which has been peer-reviewed and accepted for publication. The following highlights the significant research contributions of the accepted publications.

The first paper is entitled "Design and Implementation of a Logistics Decision Support Platform Based on Global Manufacturing from the Perspective of the Belt and Road Initiative". The author proposes a logistics decision support platform based on global manufacturing and finds that the occupation rate of CPU and MEM of the platform meets the requirements for use and reduces the logistics time and the damage rate of goods. The potential problems are resolved and progressed with respect to timeliness, and the customers' feedback is regarded to meet their requirements and improve the system.

The second paper is entitled "Evaluation and Measurement of the Development Level of Rural Inclusive Finance Using Deep Learning Technology for the Supply Chain Intelligence in Zhejiang

Province". Here, the author proposes an indicator system for the development level of rural inclusive finance in Zhejiang Province and accomplished that it was at a medium level. The proposed system depends on the deep learning technique which drives that the application areas are renovated as a prosperous platform, thereby encountering research growth and multi-model information growth.

The third paper is entitled "Forecasting Coke's Price by Combination Semi-Parametric Regression Model". The author proposes a combination semi-parametric regression method for forecasting the coke's price. A cross-validation method is utilized in determining an optimum bandwidth and selecting the Parabola kernel for the Kernel function and the least-squares estimation has been preferred in the new model estimation. As a result, a real-time application exhibits that the error-free semi-parametric regression model and BP artificial neural network-semi-parametric regression model have reduced the boundary estimation error and also strengthened the economical interpretation.

The fourth paper is entitled "The Moderating Effect of External Financing on the Relationship Between Innovation Input and Enterprise Performance: Based on the Moderating Effect Model of Two Interactions". The author examines the correlation between innovation investment and corporate performance, and the moderating effect of external financing on innovation investment and corporate performance. The research interprets that the innovation investment and equity financing have a positive impact on corporate performance, innovation input, and corporate performance correspondingly, and also the debt financing has a negative regulatory effect on innovation input and corporate performance.

The fifth paper is entitled "Research on Coordination of Time and Space Coupling Between New Urbanization and Economic Development based on Cloud Computing". The author proposes a new urbanization indicator system with typical representativeness and quantification have been implemented, and a Spatio-temporal coupling coordination model is acknowledged based on the urbanization indicator system. It has been experimentally verified that the standard of new urbanization has been enhanced rapidly and it has been downturned during a certain period of time. The urbanization coupling degree and coordination degree were low and they gradually raised with the increased time. After some time, the urbanization efficiency and economic development level gap have been progressively diminished.

The sixth paper is entitled "Research on Online Course Teaching of Public Physical Education in Universities Under the Epidemic Situation". The author focuses on the online and offline teaching modes in the special social environment and devises the university public sports online course. The research basically incorporates the requisites of an online physical education course, the design of the teaching schemes, objectives and modes of teaching, extracurricular sports activities, and assessment methods. The author constructs a set of practical online course systems for university public physical education and recognizes the allocation of educational resources among students in different regions instantly.

The seventh paper is entitled "Forecasting the Diffusion of Smart Speakers in Indian Market Using the Bass, Gompertz, and Logistic Models". The author focuses on predicting the sales of the smart speakers in India which have been launched recently. The research has used data of analogous products using look-alike analysis for evaluating the parameters of diffusion models. The author predicted the future sales using the three relevant diffusion models in deducing the model to forecast the sales of the smart speakers. As a result, the bass model has given better forecasting when compared with other models.

The eighth paper is entitled "Development of Sustainable Collaborative Management Strategy for Green Supply Chain in E-Business: Collaborative Management Strategy of Green Supply Chain Considering Sustainable Development". The author proposes a unique conceptual framework for constructing a reliable system for collaboration between foreign and domestic e-businesses, thereby refining the environment. The collaborative management strategy notions for innovation systems, industrialization of development, and product concepts are contributed. As a consequence, sustainable

development goals have been accomplished in the global economy, the green supply chain management is digitized and automated with a deep learning algorithm.

The ninth paper is entitled "Deep Learning-Assisted Performance Evaluation System for Teaching SCM in Higher Education System: Performance Evaluation of Teaching Management". The author proposes a machine learning assisted teaching performance evaluation model for supply chain management in assisting the instructors to progress, enhance teaching and learning, and help schools enrich and raise levels of accomplishment. The instructors make use of a machine learning model in determining efficient classroom delivery strategies that rely on the pupils' learning styles.

The tenth paper is entitled "The Study on the Needs of English Skills in Economics and Management Industry Based on Mobile Big Data Management and Innovative Applications". The author completely focuses on the prerequisite and emergent of social needs analysis in English teaching and emphasizes the specialization certainty, integration, and a lifetime of vocational education. The traditional English Education Mechanism is transformed into a multi-functional teaching model and cultivates them to the dual model of EGP and ESP.

The eleventh paper is entitled "Review on Website Quality and Its Impact on Customer Satisfaction". The author has made a study on the website quality along with several discussions and analyses. The quality of the system, information, service, and website design are the website quality's premier components. The website quality has a straightforward and positive conclusion on the customers' gratification, meanwhile, it has the same conclusion on the purchase intention. This effect is resolved considerably by the customers' gratification with the existence of website quality's impact on the purchase intention. As a result, the customers' gratification, website quality, postulates, together with the scientific studies have been discussed.

We appreciate all of the contributors' and referees' prompt and effective contributions. We are extremely grateful to the journal's Editor-in-Chief for giving us the opportunity to handle a special issue of this prestigious journal. We anticipate that this special issue will be of great use to the scholarly world.

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